

## **INSTALLATION METHOD OF ECO KLAY LINER SPL 30**

### **SURFACE PREPRATION**

#### **STEP 1:**

Subgrade surfaces consisting of granular soils or gravels are not acceptable due to their large void fraction and high potential to rupture the GCL sheets. We recommend a particle-size uniformity of at least 85% finer than the #60 sieve (0.25 mm) where the only barrier is GCL sheet. In other cases, particle-size distribution should be maintained between fines to 20 mm.

#### **STEP 2:**

While applying the GCL sheet, the surface must be designed in accordance with the specifications considered for the project. The on-site engineer must provide the necessary approval prior to installation. There should not be any kind of vegetation, tiny-big stones, undesired debris, any sort of hard material like sticks, rocks on the surface. There should not be any type of sandwiched hard item between the GCL sheet and the surface. The GCL sheet should lie smooth on the surface and should be in direct contact with it. Even a protrusion more than 0.5 inch (12 mm) should be made compact and smooth.

#### **STEP 3:**

To obtain this, a smooth-drum contractor can be rolled over the surface to avoid any scope for cracks. The finished surface should be smooth, rigid and should have no mobility. It should not have any protrusion, elevation, cracks or major gaps.

## **INSTALLATION**

### **STEP 1:**

GCL rolls shall be properly carried to the work site as supplied. The sheets should be carefully removed from the packaging without damaging them. The GCL sheet will have two sides i.e. woven and non-woven.

### **STEP 2:**

By consulting with the on-site engineer, kindly decide the suitable side to be laid on the ground. In ideal situation, it is preferred to lay the non-woven side on the ground.

### **STEP 3:**

There should be minimum overlaps not exceeding 150 mm. Use the processed Dry Bentonite powder (having 25+ swelling value) on the top surface of the bottom membrane at overlap area. Seal the overlap joints using the Bentonite powder. Roll forward and press firmly to ensure proper sealing. All edges, angles and abutments should be sealed with extra care.

### **STEP 4:**

The GCL sheets should lie flat without any wrinkles or folds. Pay extra attention towards the edges of the sheets.



## **ASHAPURA GCL TECHNOLOGY – EKO CLAY SPL 40**

Subject : Job mix for bentonite slurry and its application

### **STEP 1:**

GCL rolls shall be properly carried to the work site as supplied. The sheets should be carefully removed from the packaging without damaging them. The GCL sheet will have two sides i.e. woven and non-woven.

### **STEP 2:**

By consulting with the on-site engineer, kindly decide the suitable side to be laid on the ground. In ideal situation, it is preferred to lay the non-woven side on the ground.

### **STEP 3:**

For overlap of 5M edges - 300 mm overlap is required. For overlap of 40M edges - 500 mm overlap is required. Use the processed Dry Bentonite powder (having 25+ swelling value) to prepare paste. Mix water and bentonite powder and stir continuously for 10 minutes to get bentonite paste. Overlap should be sealed with bentonite paste. Bentonite paste should be applied at least 75 mm from the edge. Apply the bentonite paste on the underlying bottom GCL Roll forward and press firmly to ensure proper sealing. All edges, angles and abutments should be sealed with extra care.

Ratios of mixing:

- Bentonite of minimum of 0.6 kg – maximum 1 kg per meter required
- Paste to be made in the ratio of 1:5 of bentonite and water respectively

### **STEP 4:**

The GCL sheets should lie flat without any wrinkles or folds. Pay extra attention towards the edges of the sheets.